Technical Report

AD 640 118

MECHANIZATION STUDY
OF THE DEFENSE LOGISTICS
STUDIES INFORMATION EXCHANGE,
FORT LEE, VIRGINIA

Submitted to

Defense Supply Agency
Defense Documentation Center
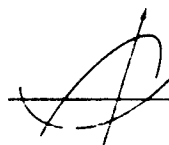Cameron Station, Virginia

by

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ABSTRACT

An RCA 501 computer is used by the Defense Logistics Studies Information Exchange to produce a thesaurus, demand bibliographies, code listings, and the Annual Department of Defense Bibliography of Logistics Studies and Related Documents. A card catalog file is maintained but will probably be discarded within 5 to 10 years. The Exchange has applied for status as a DoD Information Analysis Center; it has also been assigned an additional mission of maintaining a DoD Inventory of Technical Data and Related Efforts. Development of the thesaurus will continue, and the Annual Bibliographies and Quarterly Supplements will be printed by GPO from data on magnetic tape as soon as equipment becomes available at GPO. A survey conducted in 1963 indicated that patrons were satisfied with the services provided by the Exchange.

T A B L E   O F   C O N T E N T S

A P P E N D I C E S

INDEX OF FIGURES

I. SUMMARY

An RCA 501 computer is being used by the Defense Logistics
Studies Information Exchange to produce the Annual Department of
Defense Bibliography of Logistics Studies and Related Documents, a
thesaurus, demand bibliographies, and code listings. A backup card
catalog file is also maintained but will probably be discarded within
the next 5 to 10 years.

The U. S. Army Logistics Management Center, Fort Lee,
Virginia, is responsible for the collection, storage, and dissemination
of bibliographic information concerning logistical studies and related
material. To assist the Center in accomplishing its mission, the
Exchange was established in 1962. Appendix A illustrates the position
of the Exchange within the Center's organization. The Exchange has
a staff of nine: a manager, three reference analysts (one for each of
the Armed Services), a reference librarian, two clerk-stenographers,
a file clerk, and a keypunch operator. The staff receives requests for
information from the Logistics Management Center, other Fort Lee
activities, DoD logistics agencies, their contractors, and qualified
nonmilitary requesters. The majority of users are managerial and
research personnel.

The Exchange does not loan items; thus most of the requests are reference and bibliographic. Reference requests are generally by telephone. Requests for bibliographies are by memoranda or literature search request forms.

An accessions list is prepared manually by the Exchange for use by the analysts and for circulation throughout the Center. Periodicals are routed to the Exchange from the Logistics Management Center Library (also located at Fort Lee) for review by analysts and return to that Library. Entries in the DoD Bibliography, as well as demand bibliographies, refer to source of items since the Exchange is not a document source.

There are approximately 6,000 items in the current collection with an increase of approximately 2,000 per year. About 1,500 of the annual increase are included in the Annual DoD Bibliography, with approximately 375 appearing in each quarterly supplement.

Literature search requests from January thru mid-October 1965 numbered 162, averaging four per week, with 23 requests received the week of October 15. Indications were that the higher rate would continue for several weeks since many of the requests were for assistance in thesis research from students attending military schools where classes were just beginning.

II. MECHANIZATION

1. CHRONOLOGY

The Information Exchange was commissioned July 3, 1962.
Plans for the computer program were developed and programming was
accomplished between August and November of that year.

In January 1963, the Exchange began storing material in the file;
effective operations began that spring and the first <u>Annual Department
of Defense Bibliography of Logistics Studies and Related Documents</u>
was issued.

Plans for 1966 call for a copy of the retrieval card (with micro-
thesaurus on the back) to be added to the Annual Bibliography so that
the individual user may query the computer.

2. THESAURUS DEVELOPMENT

One of the earlier problems the Exchange had to resolve was the
development of a thesaurus of subject indexing terms, acceptable for
bibliographic purposes to all Department of Defense agencies. It was

decided to use, as a basis, the definition of "logistics" contained in the Dictionary of United States Military Terms for Joint Usage. This definition follows:

> "Logistics: The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; and d. acquisition or furnishing of services."

The definition was charted as follows:

DEFINITION OF LOGISTICS

PLANNING AND

IMPLEMENTATION

OF:

MATERIEL
Design and Development
Acquisition
Storage
Movement
Distribution
Maintenance
Evacuation
Disposition

PERSONNEL
Movement
Evacuation
Hospitalization

FACILITIES
    Acquisition and/or
    Construction
    Maintenance
    Operation
    Disposition

SERVICES
    Acquisition and/or
    Furnishing

The terms MATERIEL, PERSONNEL, FACILITIES, and SERVICES were extracted to serve as the major areas for subject coding, or the first depth for subject indexing. At a later date, experience justified the addition of four more first-level terms: ORGANIZATION, MANAGEMENT, RESOURCES, and OPERATIONS.

A further breakdown of the definition serves as a second indexing depth. The second-depth terms reflect the functions involved in the management of materiel from research and development to disposal. The third-depth term identifies the type of materiel, i.e., vehicles, communications equipment, ammunition, rations, clothing, weapons, etc. A breakout of an area (e.g., MATERIEL) illustrates the identification of a second and third indexing depth.

First Depth   MATERIEL
Second Depth   Design and Development
Third Depth   Vehicles

MATERIEL
Acquisition
Communications
Equipment

MATERIEL
Storage
Ammunition

MATERIEL
Movement
Rations

MATERIEL
Distribution
Clothing

MATERIEL
Maintenance
Weapons

etc.

Following is an example of indexing to the fourth and fifth depth:

MATERIEL
Maintenance
Weapons
Missiles
NIKE ZEUS

PERSONNEL
Movement
Helicopters
Training
SWIFT STRIKE

FACILITIES
Construction
Buildings
Family Housing
Capehart

Specific information can be retrieved about such subjects as NIKE

ZEUS missile maintenance; a phase of operation "SWIFT STRIKE";

or Capehart housing construction. This detailed and special bibliog-

raphic information is available to users upon demand.

Originally no limit was placed on the number of terms assigned

and no restrictions placed on the terms used for indexing. Now,

however, terms must be selected from the thesaurus, and new words

are added only after careful consideration. Within the past six to eight

months, a detailed study was made of the thesaurus and numerous

second-level terms were eliminated. In the future, a study will be

made of terms used only once or twice.

Plans call for completion of thesaurus development within another

year. The improved thesaurus, with scope notes, will be published and

distributed to users, most likely as part of the Annual Bibliography.

Coordination with Project LEX, a project to prepare a DoD-wide

Technical Thesaurus, is being effected.

3. DESCRIPTION OF PROCESSES

Reports, books, and periodical articles in the field of logistics are analyzed and processed for inclusion into the system. From this data base, the Annual DoD Bibliography is produced, demand bibliographies are prepared upon request, and several indexes for use by the Exchange staff are prepared. All inputs are derived from the procedures outlined below.

(1) Input Procedures

1. Logistics studies and related documents are submitted directly to the Exchange by DoD agencies in accordance with DoD Inst 5154.19.

2. Other items are selected by the analysts and ordered by the Exchange librarian.

3. Items received on distribution or loan from the Logistics Management Center Library and items specifically requested are checked in and reviewed by the analysts.

4. The analysts complete keypunching code sheets (Figure 1) containing the author code number, logistics document number, title and author(s), AD number, contractor code number, contractor name, time frame of a continuing project, date of completion, number of pages, type of document, status of project, security classification, date published, abstract, descriptors, and type of action requested. Actions include new entries, deletions, items to be suppressed in printing the Annual Bibliography but retained in the file to appear as a result in a search query, or entries for the History File. The abstract normally answers four questions: What was sought; how it was sought; what was learned; and what can be concluded from it. Terms (descriptors) are selected from the thesaurus; new terms

DEFENSE LOGISTICS STUDIES INFORMATION EXCHANGE
Keypunch Coding Sheet

ACTION REQUESTED:

◯ Initial Entry   ◯ Suppress

◯ History File

◯ Change   ◯ Current Supplement   Type of Change ◯ Suppress   ◯ Delete

1. AUTHOR (SOURCE) CODE NO. (5 Spaces)	2. LOGISTICS DOCUMENT NO. (6 Spaces)

3. DOCUMENT TITLE AND INDIVIDUAL AUTHOR NAMES (Line 1, 78 Spaces)

4. (Line 2, 78 Spaces)

5. (Line 3, 78 Spaces)

6. REFERENCE (65 Spaces)

7. AD NUMBER (7 Spaces)	8. CONTRACTOR CODE NO. (4 Spaces)

9. CONTRACTOR NAME (64 Spaces)

10. (NOT USED)

11. TIME FRAME (9 Spaces)	12. TYPE DOCUMENT (14 Spaces)

12. TYPE DOCUMENT (14 Spaces)
◯ In-House Study   ◯ Thesis
◯ Contract Study   ◯ Article
◯ Non-Govt Study   OTHER _____

13. EXPECTED COMPLETION DATE _____ (5 Spaces)

NUMBER OF PAGES + _____

14. STATUS (14 Spaces) ◯ Completed ◯ Planned ◯ In-Process ◯ Suspended

15. SECURITY CLASS. ◯ Top Secret   ◯ Secret   16. DATE PUBLISHED (5 Spaces)
◯ Confidential   ◯ Unclassified   ◯ Unknown

17. ABSTRACT (Line 1, 56 Spaces) (UNCLASSIFIED)

18. (Succeeding Lines, 77 Spaces Each)

19.

20.

21.

22.

23.

24.

AMXMC-RD-1
1 July 1965   FIGURE 1

5. (Abstract Continued)

6.	
7.	
8.	
9.	
0.	
1.	
2.	

. SUBJECT 1 DESCRIPTOR 1 (22 Spaces)		
. SUBJECT 1 DESCRIPTOR 2 (24 Spaces)		
. SUBJECT 1 DESCRIPTOR 3 (24 Spaces)		
. SUBJECT 1 DESCRIPTOR 4 (24 Spaces)		
. SUBJECT 1 DESCRIPTOR 5 (24 Spaces)		
. SUBJECT 2 DESCRIPTOR 1 (22 Spaces)		
. SUBJECT 2 DESCRIPTOR 2 (24 Spaces)		
. SUBJECT 2 DESCRIPTOR 3 (24 Spaces)		
. SUBJECT 2 DESCRIPTOR 4 (24 Spaces)		
. SUBJECT 2 DESCRIPTOR 5 (24 Spaces)		
. SUBJECT 3 DESCRIPTOR 1 (22 Spaces)		
. SUBJECT 3 DESCRIPTOR 2 (24 Spaces)		
. SUBJECT 3 DESCRIPTOR 3 (24 Spaces)		
. SUBJECT 3 DESCRIPTOR 4 (24 Spaces)		
. SUBJECT 3 DESCRIPTOR 5 (24 Spaces)		

INTERNAL USE	DO NOT KEYPUNCH	
)URCE OF EXTRACTED INFORMATION	DATE	ANALYSIS BY (Initials)

CLASSIFIED DOCUMENTS ONLY
Unclassified Description of Classified Document Approved

ATE   SIGNATURE

MXMC-RD-1
JULY 1965   FIGURE 1 (Continued)

-10-

may not be added without a careful review. New author and contractor entries may be added only after the appropriate forms have been completed and a code assigned by the librarian. (For new entry forms see Figure 2.).

5.   Worksheets with the new items are sent to the Exchange librarian.

6.   Worksheets are assigned an accession number by the librarian. Each title receives an accession number; volumes of the same title are assigned suffix letters: A, B, C, etc.

7.   The Library's keypunch operator takes the worksheets to Computer Services and punches the information on paper tape.

8.   The paper tape is verified by the keypunch operator, then given to Computer Services for processing onto magnetic tape. Additions and corrections are usually accumulated by the computer group for updating in batches of 50 - 75. (Between 400 and 500 additions are made each quarter, including items to be suppressed.)

9.   Proof listings of code sheets, author and contractor revisions, distribution labels, and list corrections, generated by the computer, are returned to the Exchange for checking. Errors are noted, corrected, and returned to Computer Services for resubmission to the system.

(2)   Outputs

1.   Annual Department of Defense Bibliography of Logistics Studies and Related Documents

This Bibliography (See Appendix B-1) of more than 1,500 items in the logistics field is published annually with quarterly supplements. Distribution is made to more than 330 activities. The Bibliography includes new items, continuing projects, a cumulation of the three quarterlies, and significant items from the previous annual edition.

DEFENSE LOGISTICS STUDIES INFORMATION EXCHANGE

Master File Revision Request

New Author Entry

AUTHOR CODE NUMBER

NAME OF AUTHOR (78 Spaces)

NAME AND ADDRESS OF AUTHOR (78 Spaces)

ADDRESS OF AUTHOR (78 Spaces)

DATE   REQUESTED BY (Initials)

DEFENSE LOGISTICS STUDIES INFORMATION EXCHANGE

Master File Revision Request

NEW CONTRACTOR ENTRY

NEW CONTRACTOR CODE NUMBER

NAME OF CONTRACTOR (64 Spaces)

ADDRESS OF CONTRACTOR (64 Spaces)

FIGURE 2

New Entry Forms

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2. Demand Bibliographies

Requests for bibliographies are forwarded to the Exchange from schools and other DoD and government agencies and their contractors, either by memo, letter, or on the standard form developed by the Exchange for use by students in military schools. The question is reviewed by the analysts, and terms to be used in the search are added to a retrieval worksheet. Items may be retrieved by subject, classification, date, corporate source, or title. Printouts from a literature search are in the same format as the entries in the Annual DoD Bibliography. Recipients of the demand bibliographies may use them as guides to what is available in the subject areas of interest. Items must be obtained from a local library or source referred to in the bibliography since the Exchange does not loan or furnish copies of documents.

3. Inverted Index

The computer prepares a printout (Appendix B-2) of all descriptors used at each level and indicates all posting against each descriptor within that level. At present this listing is used as the thesaurus and also in reviewing terms and their usage, repetition of terms within levels, etc. Copies of this listing are not distributed outside the Exchange.

4. Relative Index

This alphabetical computer printout (Appendix B-3) relates each term to the document to which it has been posted. That is, each unique combination of five descriptors is printed and the logistics document numbers are printed beneath. This list is used primarily by the analysts in reviewing and indexing the documents and is not circulated outside the Exchange.

5. Author/Sponsor Code Listing

This printout (Appendix B-4) provides codes assigned to each of the military agencies, grouped and assigned according to their location in the DoD, Army, Navy, and Air Force organizational structure.

6. Contractor Code Listing

This printout provides the same information for contractors as the Author/Sponsor Code Listing does for military activities. Codes have been assigned (on both code lists) in such a way as to allow for expansion and continuation of the alphabetical arrangement without changing the numerical sequence. New codes are added to either list only after careful consideration by the librarian.

4. MAJOR PROBLEMS

Communications between the DoD logistics research and management activities and the Exchange staff was a problem encountered in the program development stage. Within the Exchange staff, personnel training and standardization of subject descriptors and source codes have been minor problems.

5. ACTIVITIES BEING PLANNED OR DEVELOPED FOR MECHANIZATION

The Exchange has applied for status as a DoD Information Analysis Center. Expansion would increase services to include state-of-the-art reports and, at the same time, would require additional personnel.

The Exchange has been assigned an additional mission of maintaining and updating a DoD Inventory of Technical Data and Related

<u>Efforts</u>. This will involve, on a DoD-wide basis, the collection, storage, and dissemination of information about technical data management improvement actions underway or planned.

Thesaurus development will be pursued. Standardization and compromise will be made, especially in the third, fourth, and fifth levels of descriptors, to eliminate duplication of terms at different levels. Possibly other levels may be introduced. Also, Thesaurus File checks of descriptors will be made a part of the proof update routines to help catch errors earlier.

The Government Printing Office will print the Annual Bibliographies and the Quarterly Supplements from data on magnetic tape using existing editing programs as soon as equipment becomes available at GPO.

III. PROGRAM SYSTEM DATA

1. FILES

(1) Master History File

This file is composed of variable-length records of individual documents. Within a record, fields (as shown on keypunch coding sheet, Figure 1) are delineated by item separators. The records are in sequence by source, and within source, by logistics document number.

(2) Quarterly Supplement Document File

This file uses the same format as the Master History File but contains reference to only those documents added during the current quarter. After publication, the Quarterly Supplement Document File is merged into the Master History File.

(3) Source File

The Source File is in four sections: part one contains the names, addresses, and codes for all valid contractor document sources; part two contains the names, addresses, and codes to

all valid author/sponsor document sources; part three contains
the information necessary for printing the mailing labels used for
distribution; part four is the distribution list.

(4)   Thesaurus File

This file consists of one record per official term. The descriptor level number at which the term may be used is prefixed
to the term to simplify sorting. Definitions for each term will be
added in the future. There are currently about 2, 000 terms.

2.   PROGRAMS

All programs were written in machine language without the benefit
of an assembler, except for the Thesaurus List which was written in
COBOL.

(1)   Thesaurus Check

To verify the contents of the Quarterly Supplement Document File, each descriptor in the file is checked against the
Thesaurus File. Misspellings and other nonmatches are corrected by the Exchange.

(2)   Bibliography Print

The Quarterly Supplement Document File is printed by this program in the format of the Quarterly Bibliography Supplements, showing author, source, title, logistics document number, classification, descriptors, and abstract. The body of the Supplement is printed first. Each entry is assigned a line item number, and each page is numbered. A work tape is produced containing the source name and page number of each item from that source. A second work tape is produced for analysis of the use of descriptors. This tape contains four records for each item (document), the first containing level one and two descriptors, the next three containing each of the lower-level descriptors.

(3)   Source Index Print

An index is printed containing the name of each source and the first, or lowest, page number for that source. This index appears in the front of the Quarterly Supplement.

(4)   Inverted File Print

The second work tape is sorted by descriptors and line item number. Each unique combination of descriptors is printed with the line item number of the items described. The print is divided,

the first section containing only first and second level terms and the second containing all terms used on any other level.

(5)   Merge

After publication of the Quarterly Supplement Bibliography, it is merged with the Master History File. Typically, about 400 to 500 items are added per quarter, although not all of these items will appear in the Quarterly Supplement Bibliography.

(6)   Descriptor Printout

After the preparation of each Quarterly Supplement, the inverted files are printed in two volumes. In the Relative Index, each unique combination of five descriptors is printed and the author/sponsor number and logistics document number of each item are posted under it. In the Inverted Index, five chapters (representing five levels of descriptors) show single terms and logistics document numbers of those documents using that term.

(7)   Thesaurus List

All official terms are printed in alphabetic sequence and grouped by level. It is anticipated that definitions of terms will be added to this printout.

(8) Retrieval

A retrieval query paper tape, generated from the retrieval worksheet (Figure 3), contains from 1 to 24 questions from a single query. The paper tape is read, and the document file is searched for matching descriptors. A citation is printed for each match in the same format as the Bibliography.

(9) Single Field Search

This program searches the document file, comparing the contents of any or all of the 48 fields of a record. A new magnetic tape, in the same format, is generated containing all matches. This capability is used to reduce the file to a single major category of documents for more specific subsequent searches.

IV. EQUIPMENT, COSTS, AND EVALUATION

FIGURE 3
Retrieval Worksheet

IV. EQUIPMENT, COSTS, AND EVALUATION

1. EQUIPMENT

RCA 501   The computer is owned by the Army and is used for student instruction and for running simulation programs. The average operation is 1 or 1-1/2 shifts per day. The Exchange system uses about eight hours per week.

	501	with 32K memory
6	581	tape drives
	533	line printer
		paper tape reader
		card reader (600 cpm)

COBOL-61, 501 Assembly System, E2 Code--a Micro-Assembly System, and 501 Batch Sorter--a Sort Generator are also used by the Exchange.

2. COSTS AND TIME

The original system was programmed in approximately four months using 80 percent of one man's time. Since then between one and two man-months per year have been expended for improvements; two people for nine months were involved in conversion from a prototype system using IBM equipment to the present system which utilizes a RCA 501 computer. Computer support was assured by assigning a manpower space to the computer section. Planning, system design,

and conversion costs were approximately one to two man-years. Current total annual operating cost is $77,000. The three analysts index and abstract some 60 to 70 items per month, including new documents, status reports on current contracts, changes of address, assignment of AD numbers, etc. Twenty-four hours of each analyst's time per week is spent in retrievals and reference questions and review of demand bibliography printouts.

The Master History File, containing some 6,000 items, is searched in about five minutes. Each query formulation, coding, punching, and processing of a literature search question is normally completed within a 24-hour period.

The Quarterly Supplement printout of some 375 entries takes about 1 to 1-1/4 hours.
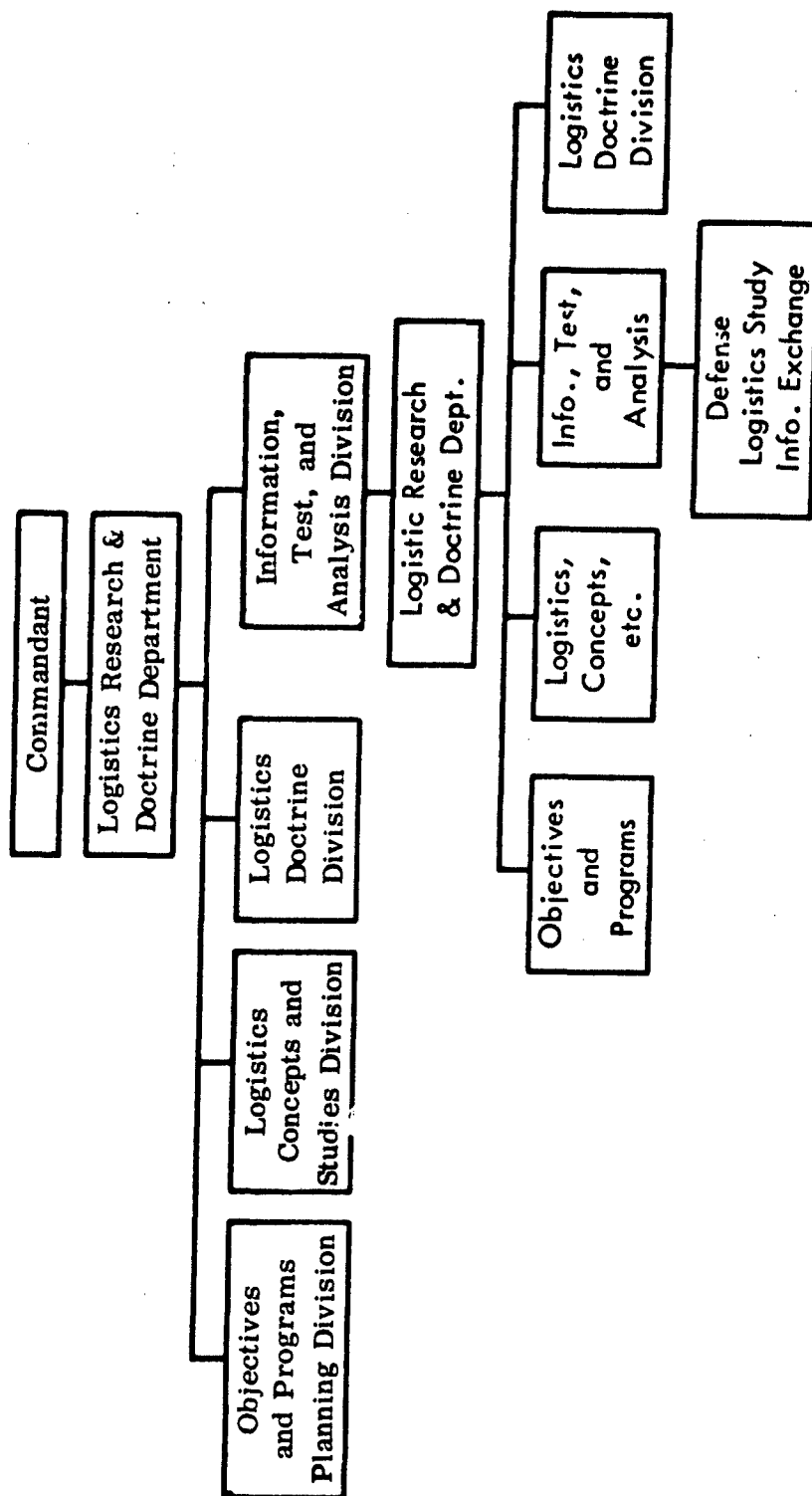
3. FACILITY'S EVALUATION OF SYSTEM

A survey of patrons was conducted in 1963, and results indicated that service was good. Ideas received from this first survey were incorporated into plans for the Exchange. Surveys will be continued every few years to obtain suggestions for improvement.

APPENDIX A

ORGANIZATION CHART

U. S. ARMY LOGISTICS MANAGEMENT CENTER

ORGANIZATION CHART

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                        ┌──────────────┐
                        │  Commandant  │
                        └──────┬───────┘
                               │
                  ┌────────────────────────┐
                  │  Logistics Research &   │
                  │  Doctrine Department    │
                  └────────────┬────────────┘
         ┌──────────────┬──────────────┬──────────────┐
         │              │              │              │
┌────────────────┐ ┌──────────┐ ┌──────────┐ ┌──────────────────┐
│ Objectives     │ │Logistics │ │Logistics │ │ Information,      │
│ and Programs   │ │Concepts  │ │Doctrine  │ │ Test, and        │
│ Planning       │ │and       │ │Division  │ │ Analysis         │
│ Division       │ │Studies   │ │          │ │ Division         │
│                │ │Division  │ │          │ │                  │
└────────────────┘ └──────────┘ └──────────┘ └──────────────────┘

                        ┌──────────────────┐
                        │ Logistic Research│
                        │ & Doctrine Dept. │
                        └────────┬─────────┘
             ┌──────────────┬──────────┬──────────────┐
             │              │          │              │
      ┌────────────┐ ┌────────────┐ ┌──────────┐ ┌──────────────┐
      │ Objectives │ │ Logistics, │ │Info.,    │ │ Logistics    │
      │ and        │ │ Concepts,  │ │Test,     │ │ Doctrine     │
      │ Programs   │ │ etc.       │ │and       │ │ Division     │
      │            │ │            │ │Analysis  │ │              │
      └────────────┘ └────────────┘ └────┬─────┘ └──────────────┘
                                         │
                                 ┌───────────────┐
                                 │ Defense       │
                                 │ Logistics Study│
                                 │ Info. Exchange│
                                 └───────────────┘
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APPENDIX B

SAMPLES OF OUTPUTS

153

COMPUTER IMPLEMENTATION OF A TIME-PHASED INPUT-OUTPUT ECONOMIC MODEL;
PEAM-1103A.

REFERENCE: RAC-SP-192
            LD 5590D

CONTRACTOR: RESEARCH ANALYSIS CORPORATION
TIME FRAME: CURRENT   TYPE OF DOC: CONTRACT STUDY   NO. OF PAGES: 53
STATUS: COMPLETED   SECURITY CLASS: UNCLASSIFIED   DATE PUBLISHED: 2/63

        (UNCLASSIFIED) THIS STUDY DESCRIBES THE PAMUSA ECONOMIC ACTIVITY
MODEL (PEAM) WHICH WAS DEVELOPED FOR THE RESOURCE-ALLOCATION ANALYSIS' PART
OF THE ARMY CHIEF OF STAFF STUDY, "POST ATTACK MOBILIZATION OF THE U. S.
ARMY - 1963 (PAMUSA-63)." IT WAS USED AS AN AID IN EVALUATING THE ABILITY
OF THE ECONOMY TO FURNISH, AT THE APPROPRIATE TIME, THE MEN AND MATERIEL
REQUIRED TO SUPPORT AN ARMY MOBILIZATION AND DEPLOYMENT SCHEDULE BY
QUARTERS, OVER A TWO-YEAR PERIOD. THIS REPORT IS PART OF THE WORK PROGRAM
UNDER RAC PROJECT 83.2 (ARMY MOBILIZATION AND ECONOMIC READINESS MODEL).

SUBJECT DESCRIPTORS:
    RESOURCES, CONTROL, MOBILIZATION

154

REPAIR PARTS MAINTENANCE REQUIREMENTS FOR FUTURE COMBAT OPERATIONS (U).

REFERENCE: RAC-RP-105
            LD 5592

CONTRACTOR: RESEARCH ANALYSIS CORPORATION
TIME FRAME: CURRENT   TYPE OF DOC: CONTRACT STUDY   EXP COMPL DATE: 8/63
STATUS: IN-PROCESS   SECURITY CLASS: UNKNOWN

        (UNCLASSIFIED) THE OBJECTIVE OF THIS EFFORT IS TO ESTABLISH THE PER-
FORMANCE CRITERIA THAT THE MAINTENANCE REPAIR PARTS SYSTEM MUST MEET TO

FACILITIES

00053	00065	00277	00278	00358	00397	00397B	00397C	00397D	00397E	0397F	00397G
00397I	00669	00792	00858	00623A	00941	00969	03082	3337	34:2	3431	03450
03523	03601	03660	03711	03712	03780	03811	03867	03924	03953	04385	05174H
05174G	05174S	05423	05425	05452	05463	05477	05560	05536	05605	05629	05659
05670	05729	05868	05874	06028	06062	06074	06094	06100	06144	06150	06158
06162	06243	06253	06253A	06259	06269	06269C	06269C	06273	06358	06398	06423
06438	06464	06476	06548	06560	06565	06574	06606A	06607	06613	06614	06623
06625	06631	06682	06683B	06560	06684	06688	06690	06694A	06694B	06695	06700
06726	06732	06779	06830	06832	06850	06835	06836	06837	06837B	06837C	06837E
06837H	06837M	06839	06841	06848	06850	06850A	06850B	06850C	06887	06931	06934
07030	07032	07032	07034	07038	07061	07062	07063	07071	07034	07085	07102
07132	07156	07157	07175	07178	07190	07220	07221	07222	07240	07248	07249
07252	07274	07289	07301	07322	07330	07358	07377	07380	07394	07403	07418
07424	07425	07428	07428A	07428B	07446	07491	07495	07496	07498	07502	07503
07504	07511	07527	07539	07543	07551	07552	07581	07568	07594	07601	07641
07651	07672	07680	07683	07683A	076636	07683D	07683C	07664	07693	07730	07776
07904	07805	07813	07843	07861	07869M	07869N	07879	07897	07898	07902	07911
07939	07939A	07939C	07939D	07939E	07972	07998	08058	08059	08076	08102	08127
08127A	C8127B	08127C	08133	08142	08150	08153	08155	08156	08158	08162	08163
08166	08167	08168	08169	08171	08206	08301	08310	08317	08319		

MANAGEMENT

00036S	00038	00039	00154	00240	00271	00293	0305	0308	0350	0C374	00468
00477	00478	00483	00503	00548	00549	0593	0634	0638	0664	0697	00724
C0752	00753	0076	00776	00790	00797	00799	0082C	00864	0873	C881	C0893K
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